CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A method for planarizing a surface which is formed on a substrate which comprises providing on the surface to be planarized a liquid slurry composition comprising abrasive particles and solid lubricant particles;
and contacting said surface with a polishing pad.

2. The method of claim 1 wherein the amount of the solid lubricant particles is about 0.3 to about 10 % by weight.

3. The method of claim 1 wherein the lubricant particles are selected from the group consisting of molybdenum disulfide, molybdenum diselenide, tungsten disulfide, tungsten diselenide, niobium disulfide, niobium diselenide, graphite, poly (tetrafluoroethylene), fluoroethylene-propylene copolymers, perfluoroalkoxy resins, polyvinylidene fluoride and mixtures thereof.

4. The method of claim 1 wherein the lubricant particles have a coefficient of friction of 0.03 to about 0.3.

5. The method of claim 1 wherein the lubricant particles have a particle size of 0.05 to about 18 microns.

6. The method of claim 1 wherein the abrasive particles comprise a member selected from the group consisting of ceria, alumina, silica, titania, zirconia, polymer particles, organic/inorganic composite particles, and combinations.

7. The method of claim 1 wherein the amount of the abrasive particles is about 0.1 to about 20 percent by weight.

8. The method of claim 1 being an aqueous slurry.

9. The method of claim 1 wherein the composition further comprising a surfactant.

10. A slurry composition comprising abrasive particles and solid lubricant particles.

11. The composition of claim 10 wherein the amount of the solid lubricant particles is about 0.03 to about 10 % by weight.

12. The method of claim 10 wherein the lubricant particles are selected from the group consisting of molybdenum disulfide, molybdenum diselenide, tungsten disulfide, tungsten diselenide, niobium disulfide, niobium diselenide, graphite, poly (tetrafluoroethylene), fluoroethylene-propylene copolymers, perfluoroalkoxy resins, polyvinylidene fluoride and mixtures thereof.

13. The composition of claim 10 wherein the lubricant particles have a coefficient of friction of 0.03 to about 0.3.

14. The composition of claim 10 wherein the lubricant particles have a particle size of 0.05 to about 18 microns.

15. The composition of claim 1 wherein the abrasive particles comprise a member selected from the group consisting of ceria, alumina, silica, titania, zirconia, polymer particles, organic/inorganic composite particles and combinations thereof.

16. The composition of claim 10 wherein the amount of the abrasive particles is about 0.1 to about 20 percent by weight.

17. The composition of claim 10 being an aqueous slurry.

18. The composition of claim 1 which further comprises a surfactant.

19. The composition of claim 1 which further comprises at least member selected from the group consisting of oxidants, preservatives and anticorrosion agents.

20. A method for planarizing a surface which is formed on a substrate which comprises providing on the surface to planarized a liquid composition comprising abrasive particles and solid lubricant particles; and

contacting said surface with a polishing pad.

21. The method of claim 20 wherein the surface to be polished is a thin film.